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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,623	07/16/2003	Daiya Yamashita	2830-0139P	7297
2292	7590	12/30/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DINH, TIEN QUANG	
			ART UNIT	PAPER NUMBER
			3644	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/619,623	Applicant(s) YAMASHITA ET AL.	
	Examiner Tien Dinh	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,6-10 and 21-29 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25,28 and 29 is/are allowed.
- 6) ☒ Claim(s) 3,4,6-10,22-24,26 and 27 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 26 and 27, please note that these claims are dependent on independent claims, which already cited the parts that are claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 26, 3, 6, 7, 8, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright in view of Mendham and Huet or Janicke et al.

Wright discloses a blade member having a first and second outer skin with wall thickness that changes and a central portion that is thicker than the leading and trailing edge, reinforcing area 9 and 7, and the blade member being made out of an alloy (see column 1, line 67 and all of the figures). However, Wright is silent on the outer skins, inner skins, and reinforcing area being integrally formed by wire electrical discharge-machining from a single block. However, Mendham discloses an aircraft part being formed by wire electrical discharge-machining is well

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known in the art. Huet or Janicke et al discloses forming integral parts from a block is well known in the art.

It would have been obvious to one skilled in the art to have made the Wright's blade system integrally formed from a block by using wire electrical discharge-machining as taught by Mendham and Huet or Janicke et al to create a stronger unitary and more efficient blade.

Please note that the wall thickness of the central portion of the first outer skin is thicker than the wall thicknesses that are next to the trailing and leading edge. See figures 2 and 3.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright as modified by Mendham and Huet or Janicke et al as applied to claim 23 above, and further in view of Camping et al.

Wright as modified by Mendham and Huet or Janicke et al discloses all claimed parts except for the substantially flat second outer skin. Camping et al teaches that a substantially flat second outer skin (see figure 4) is well known in the art.

It would have been obvious to one skilled in the art to have made the Wright's blade second outer skin substantially flat as taught by Camping et al to increase lift.

Claims 24, 27, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camping et al or Liedholm in view of Mendham and Huet or Janicke et al.

Camping et al discloses a blade member having a first and second outer skin with wall thickness with reinforcing area 5. The wall thickness of the second outer skin is smaller than the wall thickness of the first outer skin in the cord direction rearward of the at least one reinforcing

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area. See figure 4. Liedholm discloses the wall thickness of the second outer skin is smaller than the wall thickness of the first outer skin in the cord direction rearward of the at least one reinforcing area. See figure 2. However, Camping et al or Liedholm is silent on the outer skins, inner skins, and reinforcing area being integrally formed by wire electrical discharge-machining from a single block. However, Mendham discloses an aircraft part being formed by wire electrical discharge-machining is well known in the art. Huet or Janicke et al discloses forming integral parts from a block is well known in the art.

It would have been obvious to one skilled in the art to have made the Liedholm or Camping et al's blade system integrally formed from a block by using wire electrical discharge-machining as taught by Mendham and Huet or Janicke et al to create a stronger unitary and more efficient blade.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Platt et al in view of Mendham and Huet or Janicke et al.

Platt et al discloses a blade member having a first and second outer skin and reinforcing areas. See figure 7. Platt et al also shows in figure 7 that the blade portion ahead of the center reinforcing area (in this case the bottom skin) is thicker than the skin portion that is behind the reinforcing area (in this case the top skin). However, Wright is silent on the outer skins, inner skins, and reinforcing area being integrally formed by wire electrical discharge-machining from a single block. However, Mendham discloses an aircraft part being formed by wire electrical discharge-machining is well known in the art. Huet or Janicke et al discloses forming integral parts from a block is well known in the art.

It would have been obvious to one skilled in the art to have made the Platt et al's blade system integrally formed from a block by using wire electrical discharge-machining as taught by Mendham and Huet or Janicke et al to create a stronger unitary and more efficient blade.

Response to Arguments

The examiner has used some references that were cited to anticipate the amended claims. This renders applicant's arguments moot. Re claim 23, Wright in view of Mendham and Huet or Janicke et al. discloses the amended claims.

Allowable Subject Matter

Claims 25, 28, and 29 are allowed.

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

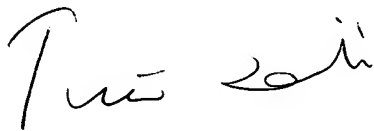
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in black ink, appearing to read "T. Smith".